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MONTHLY PLANS AND PROGRESS REPORT

Title:

Plan for the Uniform Mapping of Earth Resources and

Environmental Complexes from Skylab Imagery

Progress

Report: No. 4

Period

Covered:

1 May 1973 to 31 May 1973

Contract:

NAS9-13286

EREP Investigation #510

EarthSat

Project:

G-089

MAJOR ACCOMPLISHMENTS

This period was utilized in preparing for field and aircraft activities to support the EREP data acquisition overpasses of Skylab. Several offices of the National Weather Service (NWS) near each test site were contacted prior to scheduled EREP overpasses to alert the weather observation personnel of those agencies to provide observations in our target areas of the sky condition and visibility at each reporting station at the exact time of the Skylab overpass. We will subsequently contact the NWS offices for their observations which will then be reported to NASA Houston.

Field observations have begun in the rice crop test areas in Louisiana and California. Unusually heavy rains in the Louisiana rice growing area during March and April caused significant delays in the planting of the 1973 rice crop. The California rice crop is being planted within nominal time limits.

E73-10706) PLAN FOR THE UNIFORM MAPPING OF FARTH RESOURCES AND ENVIRONMENTAL COMPLEXES FROM SKYLAB IMAGERY Monthly progress (Earth Satellite Corp., Berkeley, Calif.) 3 p HC \$3.00 CSCL 08B

N73-25397

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We continue to receive excellent cooperation from the rice growers in the areas where test sites were established. Each grower has been given a planimetric map of his farm and surrounding area made from current aerial photos produced by EarthSat. These maps will be used to delineate ground features and to facilitate communications among cooperators and investigators.

Communications from Skylab operations indicate that repositioning of scheduled overpass lines has been necessary because of orbital parameters finally established. We have taken these changes into account in planning for field work and image interpretation and have established optimum test areas for the various overpasses.

Arrangements were made for cooperator observation of vegetational development to coincide with Skylab overpass of the Colorado Plateau test site, and EarthSat flew large-scale aerial photography support of carefully selected sample transects in both of our natural vegetational analogue test sites. Timing coincided closely with Skylab overpasses.

The support aircraft imagery taken by EarthSat has been reviewed, annotated and indexed for ready reference as a ground-truth supplement and large-scale subsample of specified analogues.

Intensive ground examination of the Colorado Plateau test site was delayed because of unusual snow conditions, but a ground-truth mission was made to the Sierra-Lahontan test site. Vegetational composition and phenology data were taken of typical analogues and a tentative selection of calibration analogue areas was made across the anticipated Skylab track.

PROBLEMS

No significant problems have been encountered to date.

PLANS FOR NEXT REPORTING PERIOD

As detailed data become available for each overpass, plans will be finalized to provide ground information in each test area and observation of atmospheric conditions at the time of overpass. EarthSat will acquire aerial photography to coincide approximately with EREP data takes.

SUMMARY OUTLOOK

The timing of the planned EREP overpasses is scheduled for one of the most ideal seasonal states for our test areas. Excellent supporting data are being obtained of these sites by EarthSat staff and we anticipate a successful mission, sky conditions permitting.

TRAVEL PLANS

As noted above, travel plans include visits to each test site to coincide as nearly as possible with the EREP data passes. EarthSat aircraft and flight crews will execute the travel plans by coordinating with NASA personnel as each data pass is scheduled. The aircraft was deployed starting May 31.

PERSONNEL

No changes.